

REMARKS

[0001] Applicant respectfully requests reconsideration and allowance of all of the claims of the application. Claims 1-32 are presently pending. No claims are amended, canceled, withdrawn, or added herein..

Formal Request for an Interview

[0002] If the Examiner's reply to this communication is anything other than allowance of all pending claims, then I formally request an interview with the Examiner. I encourage the Examiner to call me—the undersigned representative for the Applicant—so that we can talk about this matter so as to resolve any outstanding issues quickly and efficiently over the phone.

[0003] Please contact me to schedule a date and time for a telephone interview that is most convenient for both of us. While email works great for me, I welcome your call as well. My contact information may be found on the last page of this response.

Substantive Matters

Claim Rejections under § 103

[0004] The Examiner rejects claims 1-32 under § 103. For the reasons set forth below, the Examiner has not made a prima facie case showing that the rejected claims are obvious.

[0005] Accordingly, Applicant respectfully requests that the § 103 rejections be withdrawn and the case be passed along to issuance.

[0006] The Examiner's rejections are based upon the following references in combination:

- **Altinel:** *Mehmet Altinel, et al.*, non-patent literature titled "Efficient Filtering of XML Documents for Selective Dissemination of Information", 26th VLDB Conference, 2000, pages 53-64;
- **Lakshmanan:** Lakshmanan et al., non-patent literature titled "On Efficient Matching of Streaming XML Documents and Queries", University of British Columbia, Canada, 2002, pages 1-20; and
- **Schneider:** *Schneider*; United States Patent Number 5,668,987.

Overview of the Application

[0007] The Application describes a technology for filter processing using multiple filter engines.

Cited References

[0008] The Examiner cites Altinel as the primary reference, Lakshmanan as a secondary reference, and Schneider as a tertiary reference in the obviousness-based rejections.

Altinel

[0009] Altinel describes a filter engine that uses a sophisticated index structure and a modified Finite State Machine (FSM) approach to quickly locate and check relevant profiles.

Lakshmanan

[0010] Lakshmanan describes a MatchMaker system implementation that uses requirements index-based matching algorithms as a core and provides a timely notification service to registered users.

Schneider

[0011] Schneider describes a technology for improving execution speed of database queries (e.g., for decision support) by optimizing execution of nested queries or “subqueries”, such as are commonly used in client/server database environments. In particular, Schneider describes a subquery cache having a size that can be dynamically adjusted by the system during execution of the query, for achieving an optimal cache size.

Obviousness Rejections

Lack of *Prima Facie* Case of Obviousness (MPEP § 2142)

[0012] Applicant disagrees with the Examiner's obviousness rejections. Arguments presented herein point to various aspects of the record to demonstrate that all of the criteria set forth for making a prima facie case have not been met.

Based upon Altinel, Lakshmanan, and Schneider

[0013] The Examiner rejects claims 1-32 under 35 U.S.C. § 103(a) as being unpatentable over Altinel in view of Lakshmanan, and further in view of Schneider. Applicant respectfully traverses the rejection of these claims and asks the Examiner to withdraw the rejection of these claims.

Independent Claim 1

[0014] Applicant submits that the combination of Altinel, Lakshmanan, and Schneider does not render obvious at least the following elements as recited in this claim (with emphasis added):

A method, comprising:
receiving an input that conforms to a language;
determining whether the input can be processed by an optimized filter sub-engine, **wherein the optimized filter sub-engine is configured to handle *only a subset* of the language, wherein the subset of the language does not include all aspects of the language; and**

if the determining indicates that the input can be processed by the optimized filter sub-engine, then directing the input to the optimized filter sub-engine for processing;

if the determining indicates that the input cannot be processed by the optimized filter sub-engine, then directing the input to a general filter sub-engine for processing, wherein the general filter sub-engine is configured to handle all aspects of the language; and

processing the input to derive a result.

[0015] With reference to claim 1, the Examiner cites Altinel, page 57, section 4.2, paragraph 1, as teaching the claimed, “determining whether the input can be processed by an optimized filter sub-engine wherein the optimized filter sub-engine is configured to handle only a subset of the language, wherein the subset of the language does not include all aspects of the language.” (Office Action, page 3.) The Examiner quotes this citation as saying, “When a document arrives at the Filter Engine, it is run through an XML parser which then drives the process of checking for matching profiles in the Index,” and stating that, “the preceding text clearly indicates that the optimized filter engine is a filter engine and the input is a document that arrives for a filter engine to process it.” (Office Action, page 3.)

[0016] It appears to the Applicant that the Examiner is equating Altinel’s Filter Engine to the claimed “optimized filter sub-engine”. However, Altinel in no way indicates that its Filter Engine is “configured to handle *only a subset* of a language” that does not include all aspects of the language, as specified in claim 1.

[0017] The Examiner later states that, “The combination of Altinel and Lakshmanan do not explicitly teach optimized filter sub-engine.” (Office Action, page 5.) The Examiner then contends that Schneider teaches optimized filter sub-engine at column 5, lines 40-45, quoting Schneider as stating, “optimization of query execution in the presence of one or more subqueries – queries embedded within other queries.” The Examiner follows this by stating, “The preceding text clearly indicates that optimized filter sub-engine is optimization of query execution in the presence of one or more subqueries.”

[0018] Applicant fails to see the relevance of the Schneider reference with relation to claim 1. The Examiner appears to be indicating that the processing of subqueries is similar to processing performed by an optimized filter sub-engine as recited in claim 1. However, as quoted from Schneider by the Examiner, subqueries are merely queries that are embedded within other queries. Schneider describes processing of SQL queries, but makes no suggestion of a sub-engine configured to handle only a subset of SQL. That is, there is no suggestion that the subqueries are processed by an “optimized filter sub-engine that is configured to handle only a subset of the language,” as recited in claim 1.

[0019] Lakshmanan does not add to the teachings of Altinel and Schneider with regard to this element of claim 1. Neither does not the Examiner rely on Lakshmanan as teaching any portion of this element of claim 1.

[0020] Because Altinel in view of Lakshmanan and Schneider does not teach the claimed, “determining whether the input can be processed by an optimized filter sub-engine, wherein the optimized filter sub-engine is configured to handle only a subset of the language, wherein the subset of the language does not include all aspects of the

language,” Applicant submits that claim 1 is allowable over Altinel in view of Lakshmanan and Schneider. Accordingly, Applicant asks the Examiner to withdraw the rejection of this claim.

Dependent Claims 2-7

[0021] These claims ultimately depend upon independent claim 1. As discussed above, claim 1 is allowable. It is axiomatic that any dependent claim which depends from an allowable base claim is also allowable. Additionally, some or all of these claims may also be allowable for additional independent reasons.

Independent Claims 8, 15, and 23

[0022] These claims recite elements that are similar to those discussed above with reference to claim 1. Furthermore, the Examiner provides the same rationale for rejecting these claims as is provided for rejecting claim 1. Consequently, Application submits that independent claims 8, 15, and 23 are allowable over the combination of Altinel, Lakshmanan, and Schneider at least for reasons similar to those presented above with reference to claim 1. Accordingly, Applicant asks the Examiner to withdraw the rejection of these claims.

Dependent Claims 9-14, 16-22, and 24-32

[0023] These claims ultimately depend upon independent claims 8, 15, and 23, respectively. As discussed above, claims 8, 15, and 23 are allowable. It is axiomatic that any dependent claim which depends from an allowable base claim is also allowable. Additionally, some or all of these claims may also be allowable for additional independent reasons.

Conclusion

[0024] All pending claims are in condition for allowance. Applicant respectfully requests reconsideration and prompt issuance of the application. If any issues remain that prevent issuance of this application, the **Examiner is urged to contact me before issuing a subsequent Action.** Please call or email me or my assistant at your convenience.

Respectfully Submitted,

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